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THE STUDENT PERSPECTIVE
OF HIGH SCHOOL LABORATORY EXPERIENCES
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High school science laboratory experiences are an accepted teaching practice across the nation despite a lack of research evidence to support them. The purpose of this study was to examine the perspective of students—stakeholders often ignored—on these experiences. Insight into the students' perspective was explored progressively using a grounded theory methodology. Field observations of science classrooms led to an open-ended survey of high school science students, garnering 665 responses. Twelve student interviews then focused on the data and questions evolving from the survey.

The student perspective on laboratory experiences revealed varied information based on individual experience. Concurrent analysis of the data revealed that although most students like (348/665) or sometimes like (270/665) these experiences, some consistent factors yielded negative experiences and prompted suggestions for improvement. The category of responses that emerged as the core idea focused on

student understanding of the experience. Students desire to understand the *why do*, the *how to*, and the *what it means* of laboratory experiences. Lacking any one of these, the experience loses educational value for them. This single recurring theme crossed the boundaries of age, level in school, gender, and even the student view of lab experiences as positive or negative.

This study suggests reflection on the current laboratory activities in which science teachers engage their students. Is the activity appropriate (as opposed to being merely a favorite), does it encourage learning, does it fit, does it operate at the appropriate level of inquiry, and finally what can science teachers do to integrate these activities into the classroom curriculum more effectively? Simply stated, what can teachers do so that students understand what to do, what's the point, and how that point fits into what they are learning outside the laboratory?